

CLAIM AMENDMENTS

1. (Currently Amended) A steering control apparatus ~~which comprises comprising:~~
 target steering reaction torque generation means for generating a target steering
 reaction torque as a target value of a steering reaction torque to be applied to a steering
 wheel, and ~~performs a control so that the~~ for controlling steering reaction torque ~~is coincident~~
~~to coincide~~ with the target steering reaction torque, ~~the steering control apparatus being~~
~~characterized in that wherein~~ the target steering reaction torque generation means includes
 steering shaft reaction torque estimation means for estimating a steering shaft
 reaction torque, and
 reference road reaction torque estimation means for estimating a reference
 road reaction torque, ~~and uses the target steering reaction torque generation means using the~~
 steering shaft reaction torque estimated by the steering shaft reaction torque estimation means
 and the reference road reaction torque estimated by the reference road reaction torque
 estimation means to set the target steering reaction torque.

2. (Currently Amended) ~~A~~ The steering control apparatus as set forth in claim 1,
 wherein the steering shaft reaction torque and the reference road reaction torque are weighted
 and are used for setting of the target steering reaction torque.

3. (Currently Amended) ~~A~~ The steering control apparatus as set forth in claim 2,
 wherein a coefficient used for weighting of the steering shaft reaction torque and the
 reference road reaction torque is changed according to speed of a vehicle ~~speed incorporating~~
~~the steering control apparatus.~~

4. (Currently Amended) A steering control apparatus as set forth in ~~any one of claims~~
~~1 to 3~~ claim 1, wherein the target steering reaction torque set by the target steering reaction
 torque generation means and the target steering reaction torque set by the reference road
 reaction torque during holding of a steering wheel connected to the steering control apparatus
 are used ~~to perform for~~ weighting, according to ~~a steering angular velocity, and to set~~ a new
 target steering reaction torque ~~is set~~.

5. (Currently Amended) ~~A~~ The steering control apparatus as set forth in ~~any one of~~
~~claims 1 to 4, wherein claim 1, including~~ a steering wheel shaft coupled to a steering wheel
 and a wheel turning mechanism for turning a wheel ~~are~~ coupled to each other through a
 differential gear mechanism, ~~and the steering control apparatus is characterized in that~~

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differential gear mechanism, ~~and the steering control apparatus is characterized in that~~
wherein the steering shaft reaction torque estimation means uses a motor current of a steering
angle motor for controlling a wheel steering angle, a steering reaction torque, and a steering
shaft angular acceleration to estimate the steering shaft reaction torque.